NY

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-4253

Thomas C. Jorling
Commissioner

December 11, 1990

Mr. James P. Linnane
US Department of Agriculture
Cor. Concord & Mast Roads
P.O. Box 640
Durham, New Hampshire 03824

Dear Mr. Linnane:

Enclosed are completed forms and maps. These records describe some important forest health problems in New York State. The information transmitted herein should be used in compiling your National and Area Pest Condition's Report.

Since documents rarely are comprehensive or clear enough to capture everything that Dennis may need to compile the Forest Service report, please extend my offer to provide any additional information he may require.

Sincerely,

Michael J. Birmingham
Associate Forester

Enclosures

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:
sugar maple and black cherry

PRESENT CONDITION:

AREA (TOTAL ACRES): 100,000 acres

LOCATION:

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

primarily in eastern Delaware County

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

moderate

TREND:

PAST TO PRESENT: decline

FUTURE:

stable

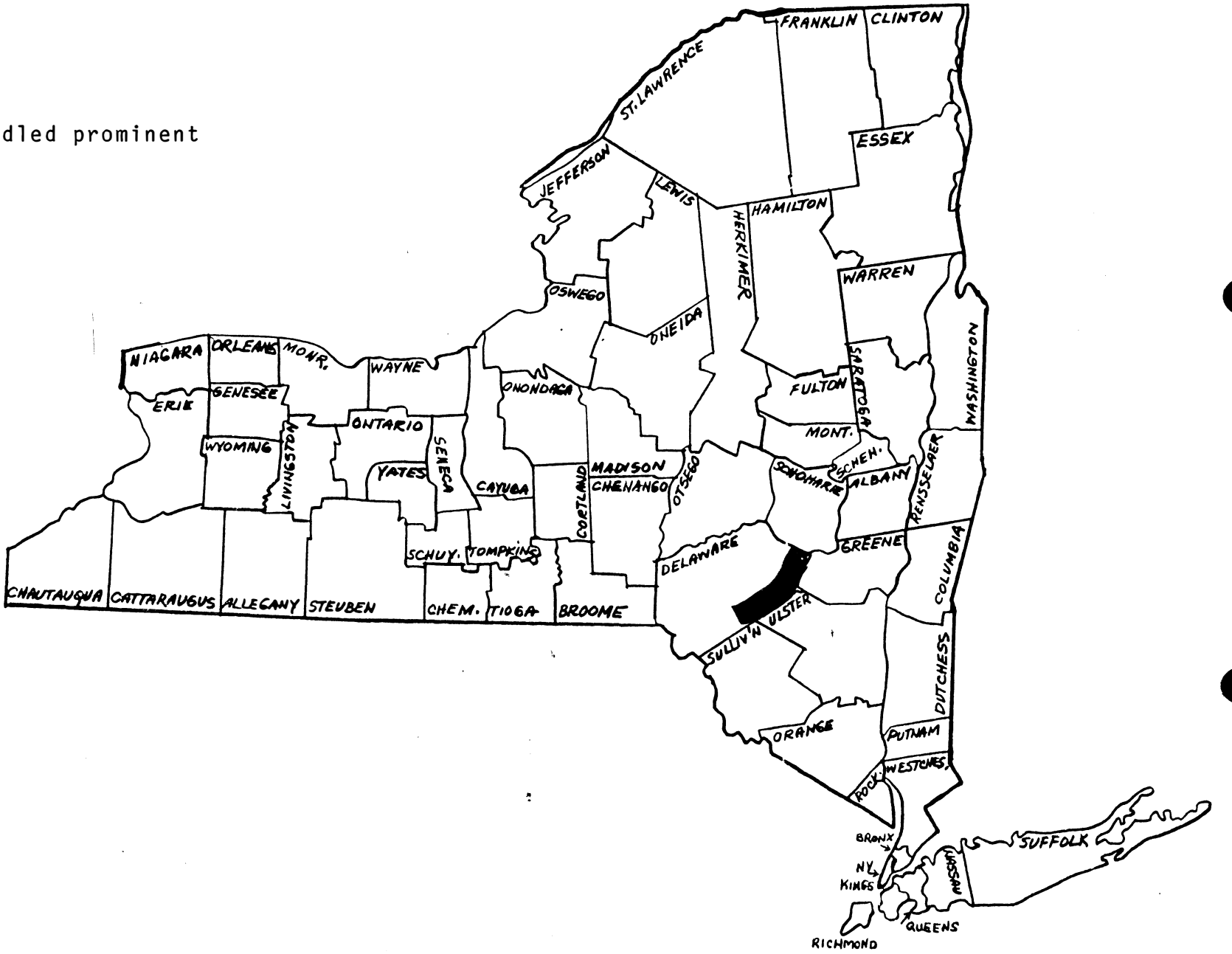
CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

aerial sprays

COMMENTS:

An explosive buildup of the insect in 1989 followed by an equally explosive dieoff of larvae. The dieoff occurred in the same year as the outbreak. The cause of dieoff was a larval disease in the fungus class.

Saddled prominent



NEW YORK

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:
black cherry

PRESENT CONDITION:

AREA (TOTAL ACRES):
not computed

LOCATION:

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

Rensselaer C ounty

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

none

TREND:

PAST TO PRESENT:
The fastest buildup of population since the 1970's

FUTURE:

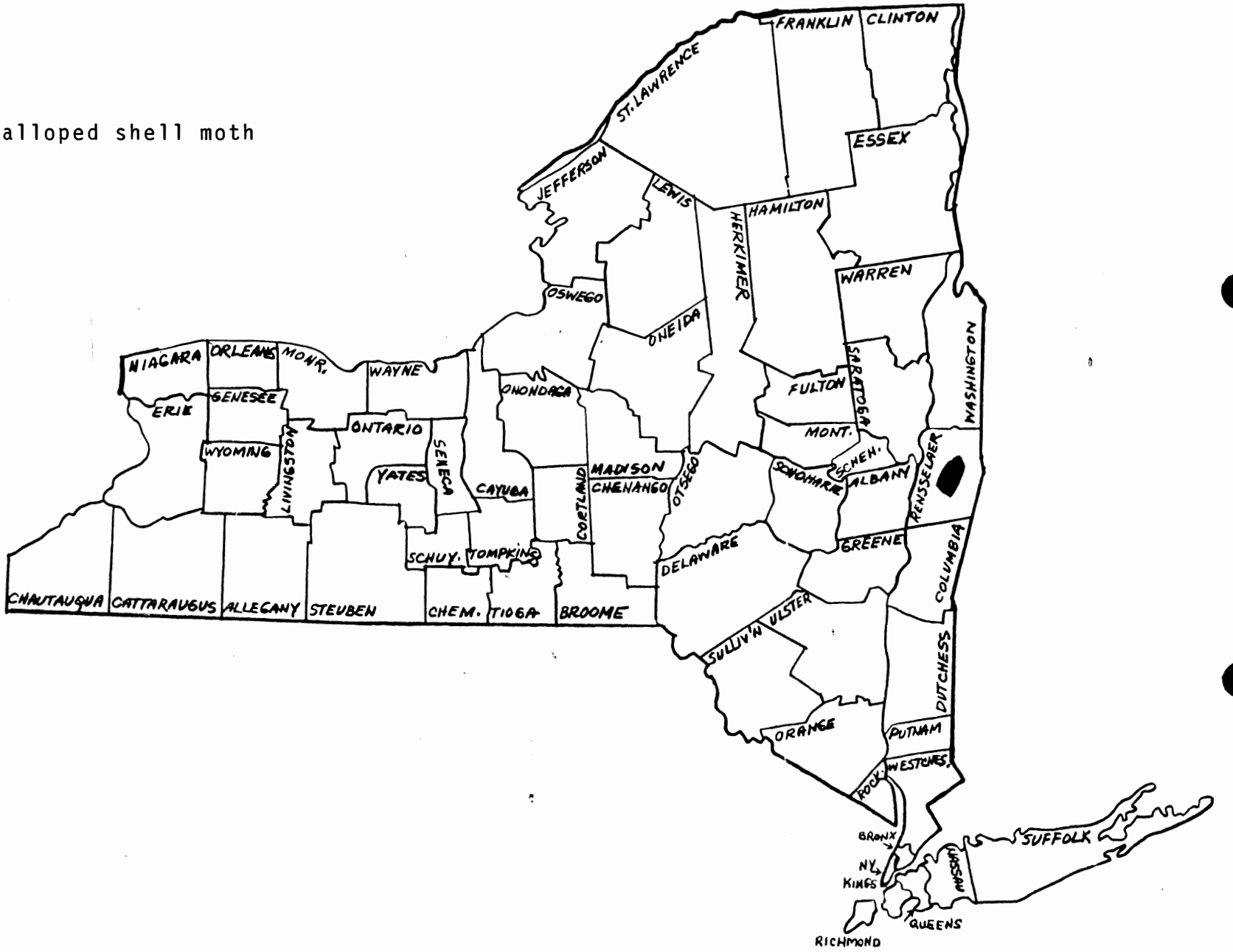
unknown

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

none

COMMENTS:
Enormous foliage damage in regions of Rensselaer County between Route 2, Grafton State Park, Cherry Plains State park and Poestenkill. Trees appeared as scorched. Calls from anxious park officials and public. No evidence of parasitism.

Cherry scalloped shell moth



NEW YORK

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:

sugar maples and black cherry

PRESENT CONDITION:

AREA (TOTAL ACRES):

none

LOCATION:

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

Jefferson County

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

none

TREND:

PAST TO PRESENT:

decline

FUTURE:

stable at low populations

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

aerial sprays of sugar bushes and valuable sugar maple woodlots

COMMENTS:

Heavy population last year destroyed by disease and pupal parasitism.

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME):

(SPECIFIC NAME): [redacted]

HOST:

white ash

PRESENT CONDITION:

AREA (TOTAL ACRES):

statewide

LOCATION:

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

ranges from little damage to complete ash stands dying.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

unknown

TREND:

PAST TO PRESENT: stable at high levels

FUTURE:

continuation of high infection rates.
Ash continues to comeback in large numbers on inactive agricultural lands.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

none but timely salvage.

COMMENTS:

Ash dieback is largely the result of ash yellows disease. The disease continues for more than 30 years to take an enormous toll of ashes. About 80 percent of the white ash found dead are killed by ash yellows, which produces a witches broom. The remaining 20 percent of mortality is caused by unknown factors.

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:

maples

PRESENT CONDITION:

AREA (TOTAL ACRES): statewide

LOCATION:

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

light throughout New York

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

Some mortality from prior years of infestation, but mortality scattered and usually associated with other stress induced causes such as logging and resultant site damage.

TREND:

PAST TO PRESENT:

decline

FUTURE:

become stable at low populations levels with occassional outbreaks.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

none recommended

COMMENTS:

This insect was spectacular in 1985 and as recently as 1989. But a disease appears to have destroyed the population as reported by Vermont researchers. Populations conti guous with Vermont within New York State colapsed at the same time as did those in Vermont. Also, unexplained is the large numbers of thrips observed in maple buds that failed to produce maple leaf symptoms.

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:

butternut

PRESENT CONDITION:

AREA (TOTAL ACRES):

LOCATION: statewide

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

a tree killer

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

nearly all mature butternut in New York killed.

TREND:

PAST TO PRESENT:

increased

FUTURE:

decline as butternut disappears throughout the state.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

unknown

COMMENTS:

This disease caused little attention. Butternut is not a particularly important species for wood products. Until the tree appeared on the Federal list of potential endangered species, little was heard or reported on the disease. In field inspections, I have noted most butternut trees have a canker or had died.

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:
Norway maple

PRESENT CONDITION:

AREA (TOTAL ACRES):
unknown

LOCATION:

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

sporadic

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

none

TREND:

PAST TO PRESENT:
rapid increase in acreage

FUTURE:
spread throughout New York

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

none tried or reported

COMMENTS:

First reported in Erie and Herkimer Counties, the leaf disease occurred in widely scattered locations in New York. Severe infections resulted in premature leaf drop and blighting of Norway maples. Large tar spot disease, favored by prolong wet spring and summer was from the public's view point one of the most spectacular pest problems in 1990.

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST: Red, Scotch and eastern white pines

PRESENT CONDITION:

AREA (TOTAL ACRES): 4,400

LOCATION: northwestern Adirondacks

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

4,400 acres of combined heavy and moderate damage.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

not computed

TREND:

PAST TO PRESENT: increasing

FUTURE:

additional acreage. Currently increasing at an accelerating rate.

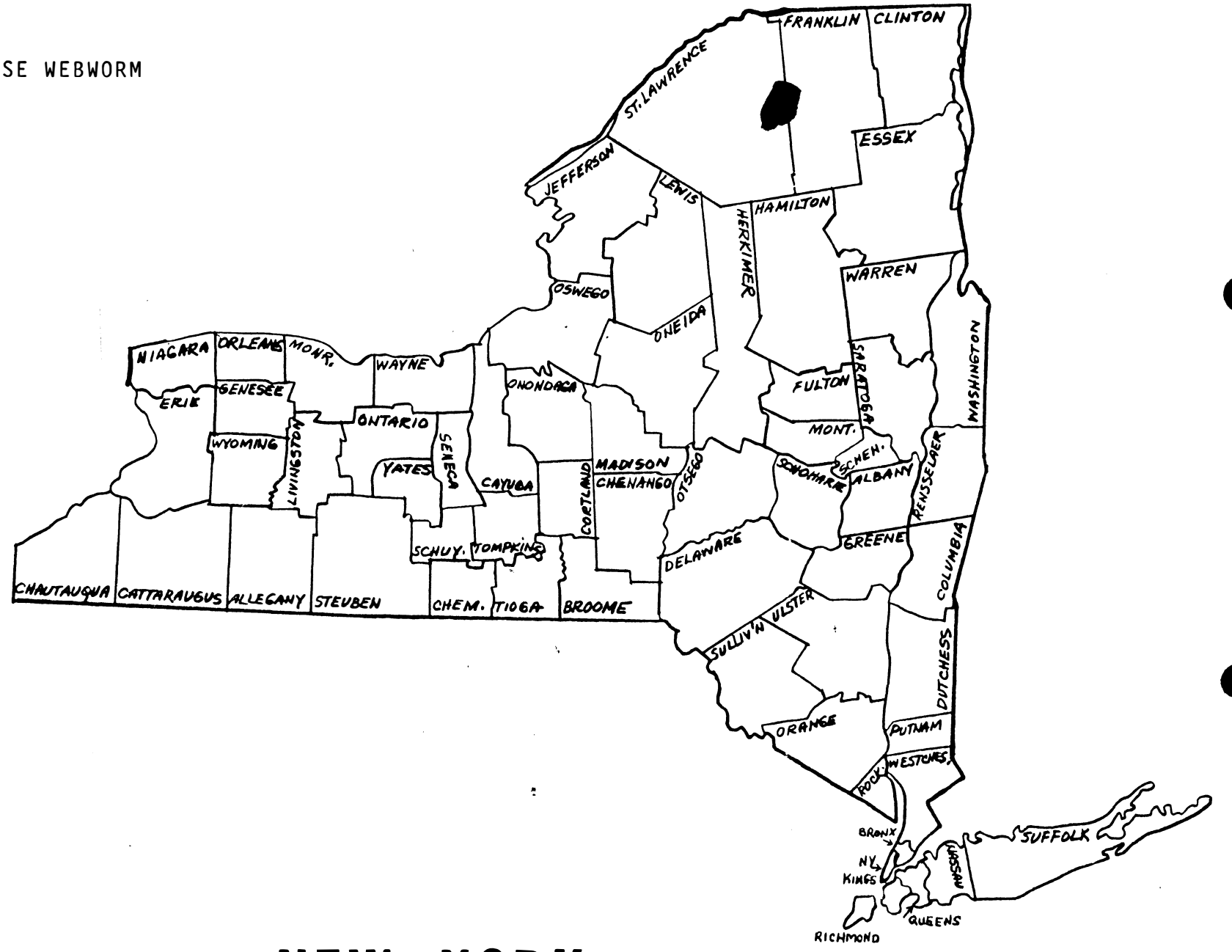
CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

Christmas tree growers applying annual insecticidal applications to control the insect's damage.

COMMENTS:

We have applied for special project moneys from the US Forest Service. These moneys would fund needed research on the insect's biology and its impacts on host trees.

PINE FALSE WEBWORM



NEW YORK

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST: sycamore

PRESENT CONDITION:

AREA (TOTAL ACRES): not computed

LOCATION: southeastern New York and Capital District Region

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

complete defoliation of shade and wild sycamores

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

None.

TREND:

PAST TO PRESENT: In the past two years, the tend has increased.

FUTURE: Expect declines.

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

Sprays help reduce anthracnose infections.

COMMENTS:

This year and last are the two worst years for anthranose twig and leaf infections in 25 years, as long back as there is records or memory of this disease. Two consecutive wet springs and summers are responsible for the high rates of infections.

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:

eastern hemlock

PRESENT CONDITION:

AREA (TOTAL ACRES):

not computed

LOCATION:

southeastern New York.

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

Scale populations as high as 10 scales per needle.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

Mortality of hemlock not attributed to needle scales. In combination with adelgids, needle scales may hassen hemlock mortality.

TREND:

PAST TO PRESENT:

Stable

FUTURE:

stable or declining. The primary locations where the needle scales occur is where the adelgid also occurs.

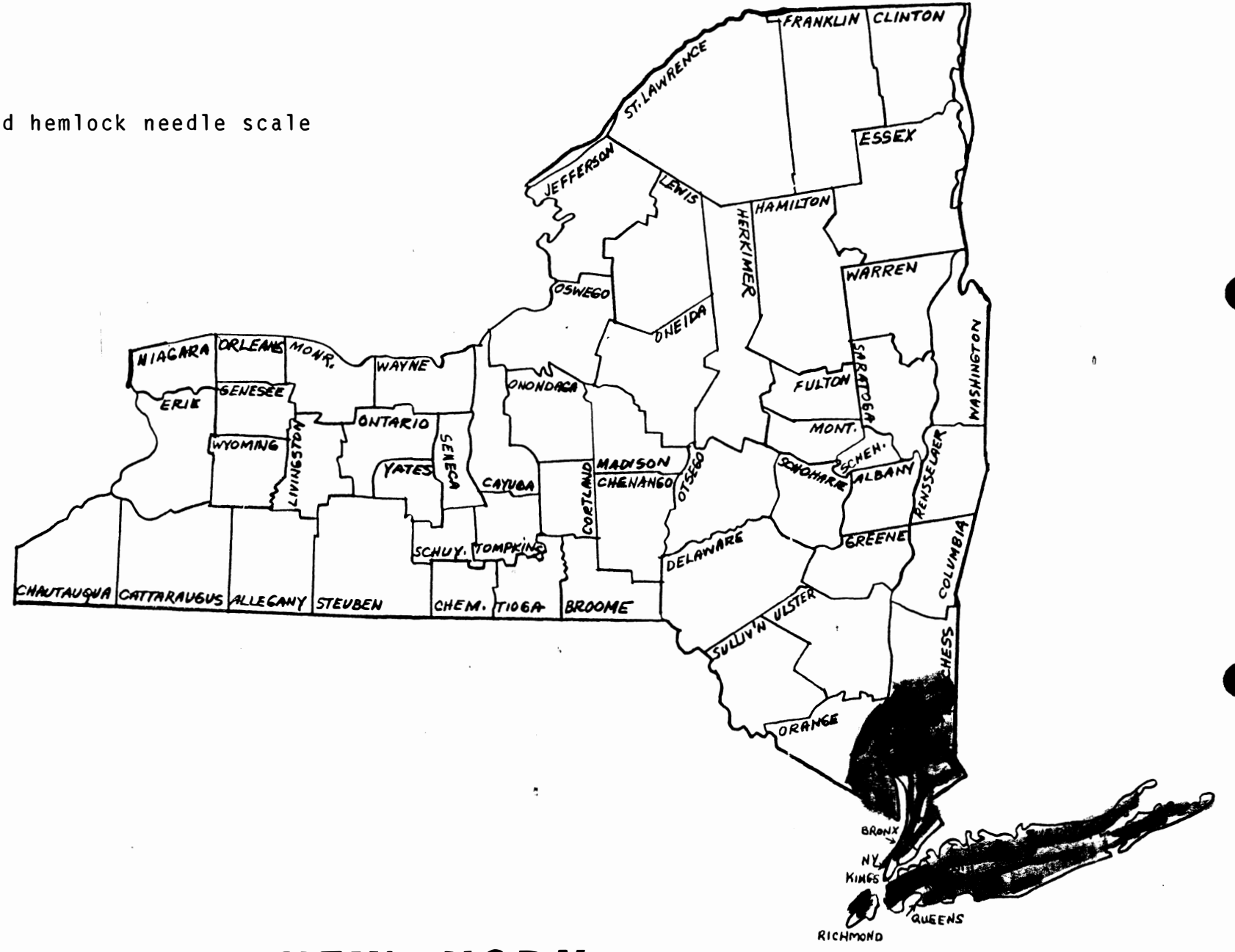
CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

Suffocants work well to suppress needle scales.

COMMENTS:

Needle scales are so heavy that they color the hemlocks a whitish color. Heavily infested hemlocks have thin, yellowing crowns. Some scientist believe that hemlocks die only when they are first weakened by the needle scales and then attacked by the adelgid. As the adelgid moves northward in New York, out of the needle scale's range, then a comparison can be made between hemlocks infested with needle scale and adelgids and those solely infested with the adelgid.

Elongated hemlock needle scale



NEW YORK

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:
red pine

PRESENT CONDITION:

AREA (TOTAL ACRES): not computed

LOCATION: southeastern New York

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

Mortality occurs in all infested counties

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

Volumn of loss unknown

TREND:

PAST TO PRESENT:
Scale population declining.

FUTURE:
Futher declines.

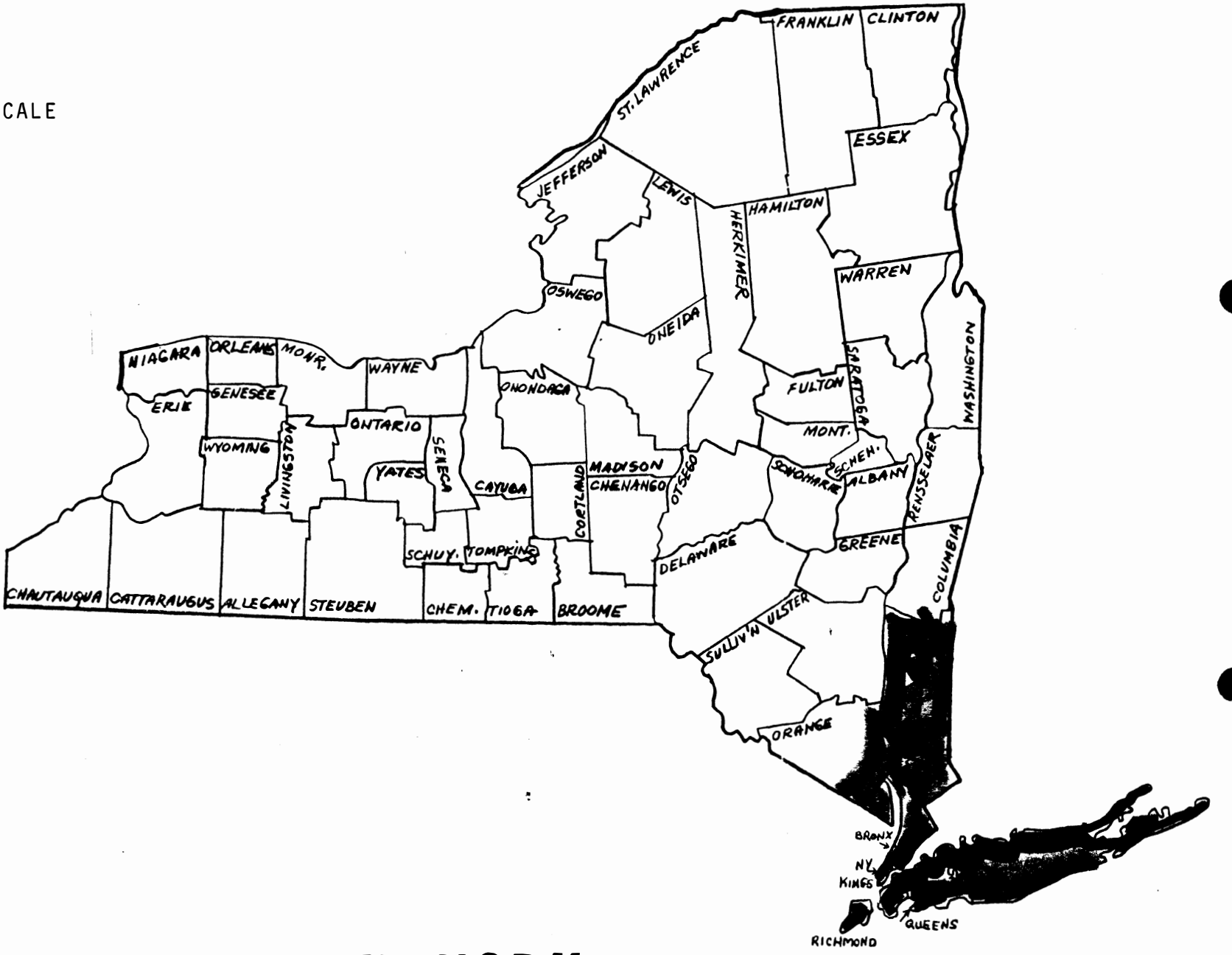
CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

Non. Infested pine salvaged.

COMMENTS:
Red pine scale is declining due to the decline in numbers of red pine. Red pine declined due to reaching biological maturity on heavy soils typical of this region of the state, namely the soils north of New York City to the east and west of the Hudson River within the Hudson River Valley.

Red pine plantations have declined in acreage due to toppling of pines from wind and breakage. There are few pine plantations south of Columbia County on the eastside of the Hudson River. There is little scale population on the westside of the Hudson River.

RED PINE SCALE



NEW YORK

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST: Eastern Hemlock

PRESENT CONDITION:

AREA (TOTAL ACRES): Not computed

LOCATION: southeastern New York

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

Heavy mortality in Westchester, Putnam, Rockland and Orange Counties. Moderate mortality in above counties - no acreage figures computed.

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

Unknown volumn of hemlock killed.

TREND:

PAST TO PRESENT:

Increased acreage infested; increased mortality since the first infestation discovered in New York in 1987.

FUTURE:

Mortality and acreage will increase.

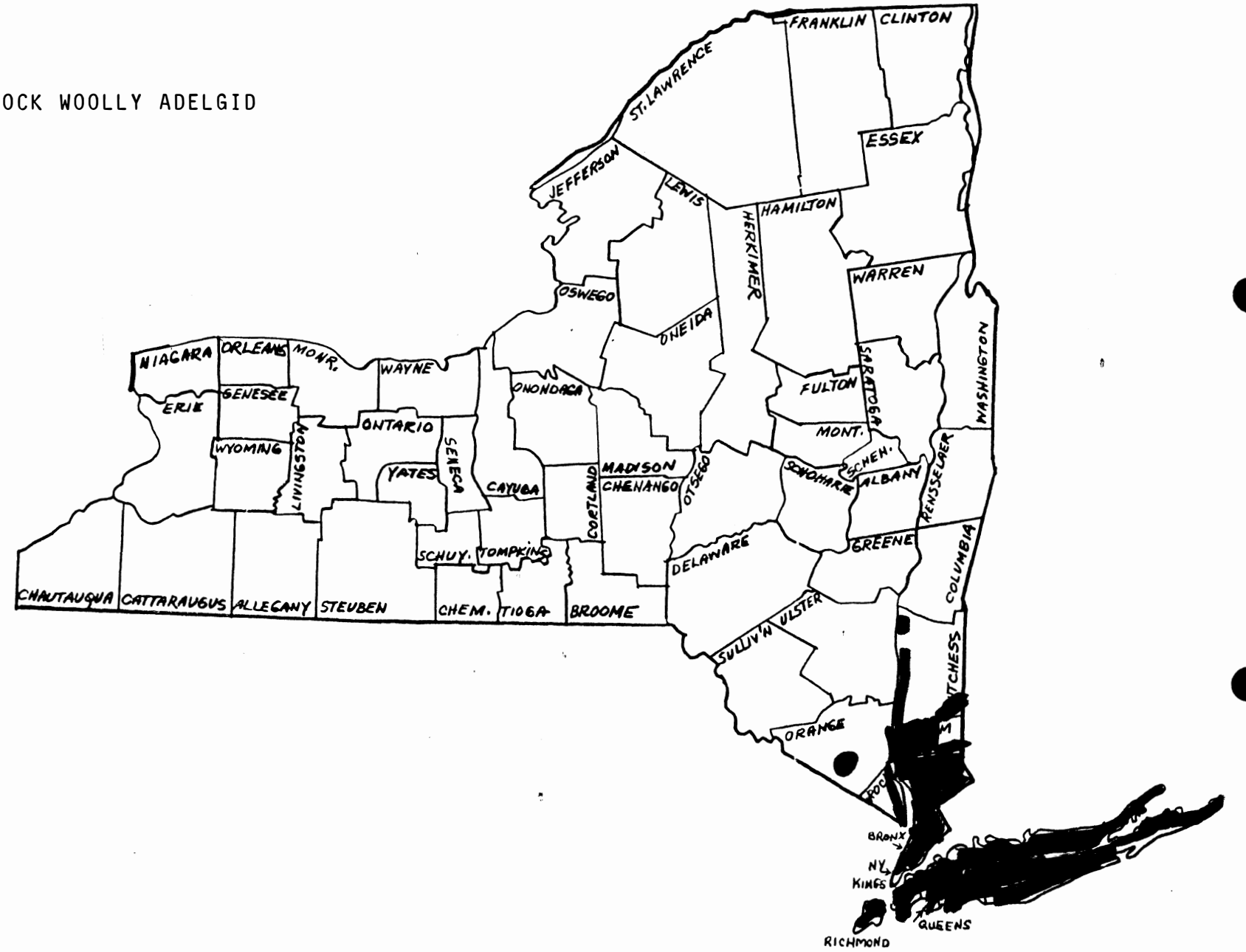
CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

Suffocants work very well to suppress adelgids on ornamental hemlocks

COMMENTS:

The adelgid is the single most important factor affecting the health of hemlock in New York. There is a rapid increase in the acreage infested each year. New infestations were discovered in the towns of Hyde Park, Red Hook, and Pawling in Dutchess County. New infestations also were found for the first time in the town of Warwick, Orange County.

HEMLOCK WOOLLY ADELGID



NEW YORK

1990 PEST CONDITIONS REPORT WORKSHEET

PEST (COMMON NAME): [redacted]

(SPECIFIC NAME):

HOST:

rhodendron

PRESENT CONDITION:

AREA (TOTAL ACRES):

LOCATION: Harriman estate

SEVERITY (INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES):

severe mortality

LOSSES (INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES):

unknown

TREND:

PAST TO PRESENT: high and stable

FUTURE: decline due to elimination of host

CONTROL PROJECTS (METHOD, MATERIAL, ACRES, COST, RESULTS):

none

COMMENTS:

The insect clusters on the underside of the leaves of host plants. Leaves turn yellow and fall. Dieback occurs and whole plants are denuded and die. The insect has destroyed the host throughout the Harriman Estate property located in Orange County.